

WHAT IS CLAIMED IS:

1. A method of photoresist stripping for an organic light-emitting display (OLED) panel, comprising:

providing at least one n-butyl acetate treatment of the OLED panel;

5 providing at least one isopropyl alcohol treatment of the OLED panel;

cleaning the surface of the OLED panel one or more times with de-ionized water; and

removing de-ionized water from the surface of the OLED panel using an air knife.

10 2. The method of claim 1, wherein the step of treating the OLED panel with n-butyl acetate comprises spraying the liquid onto the OLED panel surface or immersing the entire OLED panel into a pool of the liquid.

3. The method of claim 1, wherein the step of treating the OLED panel with n-butyl acetate comprises immersing the entire OLED panel into a pool of the liquid.

15 4. The method of claim 1, wherein the step of treating the OLED panel with n-butyl acetate comprises spraying the liquid onto the OLED panel surface.

5. The method of claim 1, wherein the step of treating the OLED panel with n-butyl acetate comprises a combination of spraying the liquid onto the OLED panel surface and immersing the entire OLED panel into a pool of the liquid.

20 6. The method of claim 1, wherein the step of treating the OLED panel with isopropyl alcohol comprises immersing the entire OLED panel into a pool of the liquid.

7. The method of claim 1, wherein the step of cleaning the OLED panel with de-ionized water comprises spraying the liquid onto the OLED panel surface.

8. The method of claim 1, wherein the step of using n-butyl acetate to strip photoresist material from the surface of the OLED panel further comprises shuttling the OLED panel inside the n-butyl acetate reaction chamber.

9. An apparatus of photoresist stripping for an organic light-emitting display (OLED) panel, comprising:

a stripping unit that provides at least one n-butyl acetate treatment of the OLED panel and/or at least one isopropyl alcohol treatment of the OLED panel to remove photoresist on the surface of the OLED panel;

a washing unit that sprays a cleaning solution to remove n-butyl acetate and/or isopropyl alcohol on the surface of the OLED panel;

a blow-drying unit for drying the OLED panel;

a transporting unit for continuously transferring OLED panels to the stripping unit, the washing unit and the blow-drying unit; and

a control unit for controlling the sequence and timing of transfer of OLED panels to each treatment unit.

10. The apparatus of claim 9, wherein the apparatus further includes a carrier unit for holding waiting OLED panels or providing a buffer region for holding OLED panel after photoresist development so that the OLED panels may be directly transferred to a subsequent module.

11. The apparatus of claim 9, wherein the apparatus further includes a downloading unit for holding photoresist stripped OLED panels or providing a buffer region for holding photoresist stripped OLED panels so that the photoresist stripped OLED panels may be directly transferred to a high-temperature baking module.

12. The apparatus of claim 9, wherein the stripping unit includes at least one n-butyl stripping baths and at least one isopropyl alcohol stripping baths.

13. The apparatus of claim 12, wherein the n-butyl acetate stripping baths are positioned to form a serial configuration, a parallel configuration or a mixture of bath.

5        14. The apparatus of claim 12, wherein the isopropyl alcohol stripping baths are positioned to form a serial configuration, a parallel configuration or a mixture of bath.

15. The apparatus of claim 12, wherein the isopropyl alcohol stripping baths are positioned behind the n-butyl acetate stripping baths.

10        16. The apparatus of claim 9, wherein the washing unit includes a plurality of washing baths.

17. The apparatus of claim 16, wherein the cleaning baths are positioned serially.

18. An apparatus of photoresist stripping for an organic light-emitting display (OLED) panel, comprising:

15        a stripping unit that provides at least one n-butyl acetate treatment of the OLED panel and/or at least one isopropyl alcohol treatment of the OLED panel to remove photoresist on the surface of the OLED panel;

      a washing unit that sprays a cleaning solution to remove n-butyl acetate and/or isopropyl alcohol on the surface of the OLED panel; and

      a blow-drying unit for drying the OLED panel.

20        19. The apparatus of claim 18, wherein the apparatus further includes a transporting unit for continuously transferring OLED panels to the stripping unit, the washing unit and the blow-drying unit.

20. The apparatus of claim 18, wherein the apparatus further includes a control unit for controlling the sequence and timing of transfer of OLED panels to each treatment unit.